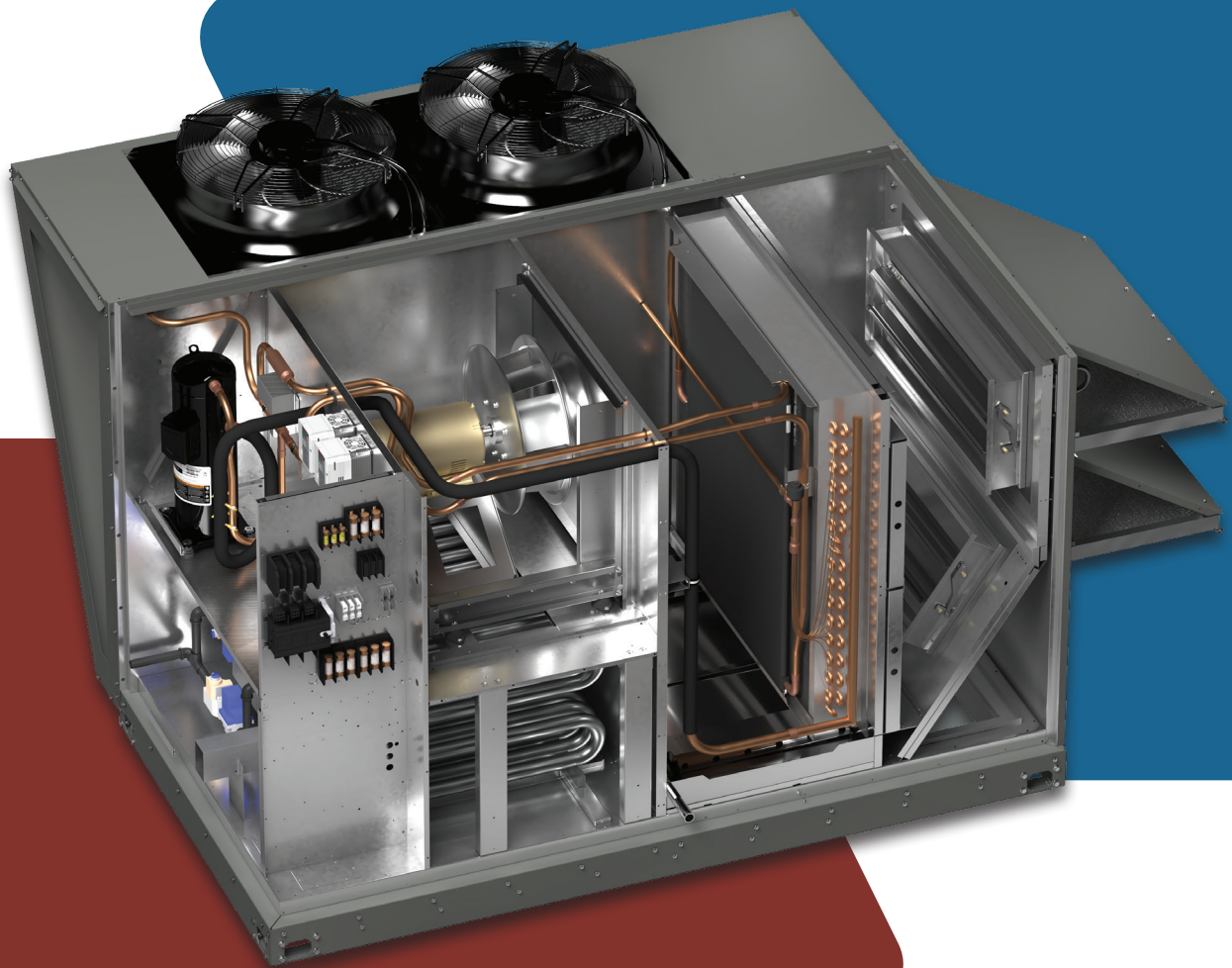**valent**®

OUTDOOR AIR EXPERTS
ROBUST DESIGNS
DEDICATED SUPPORT

THE VALUE OF VALENT

ROBUST DESIGNS, AFFORDABLE QUALITY

Valent designs and manufactures dedicated outdoor air handling units that require robust cabinets and components to effectively condition 100% outdoor air — on the coldest winter day or the most humid summer day.

Efficient manufacturing allows Valent to provide affordable products while raising the bar on quality.

Valent's goal is to provide customers with affordable quality.

OUTDOOR AIR EXPERTISE BUILT INTO EVERY PRODUCT

Valent's fully integrated and interoperable controls ensure reliable and efficient performance. We've applied our years of applications knowledge to create flexible control sequences proven across thousands of high outdoor air installations.

Valent's energy recovery portfolio is diverse to meet most project requirements. We understand application subtleties, like boosting efficiency with energy wheels that modulate to address changing outdoor conditions, or enthalpic plate heat exchangers that recover latent energy with no moving parts.

Controls and energy recovery expertise are key to optimal DOAS performance.

DEDICATED SUPPORT

We work with experienced reps and their talented sales engineers across North America. Our reps partner with Valent sales and support engineers to add value during design, installation, and operation phases.

**Before and after the sale, we're there when you need us.**

VALENT DOAS PRODUCTS

CONDITION UP TO 100% OUTDOOR AIR

All Valent units are designed to cool, heat, and dehumidify a wide range of entering air loads, up to 100% outdoor air. Valent units are also used in mixed air applications due to their value-added features, which include inverter scroll compressors, ultra-quiet condensing fans, and durable construction and components.

Valent units can be configured as DOAS rooftop units with or without integral energy recovery. See the tables in this brochure for capacities. See the **Valent Datasheet** for product specifications by model.
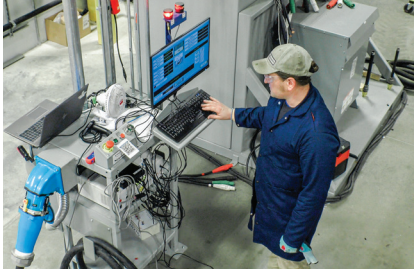

DOAS ROOFTOPS

INTEGRAL ENERGY RECOVERY

NUMEROUS COMBINATIONS

COOLING 3–70 TONS
AIRFLOW 500–18,000 CFM

8,640
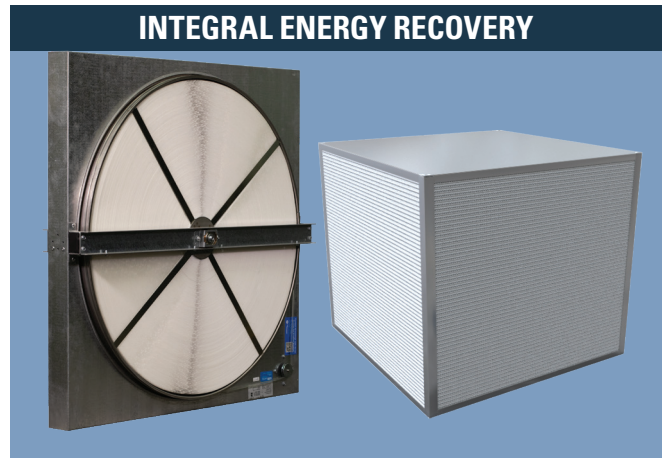
CONFIGURABLE COMBINATIONS
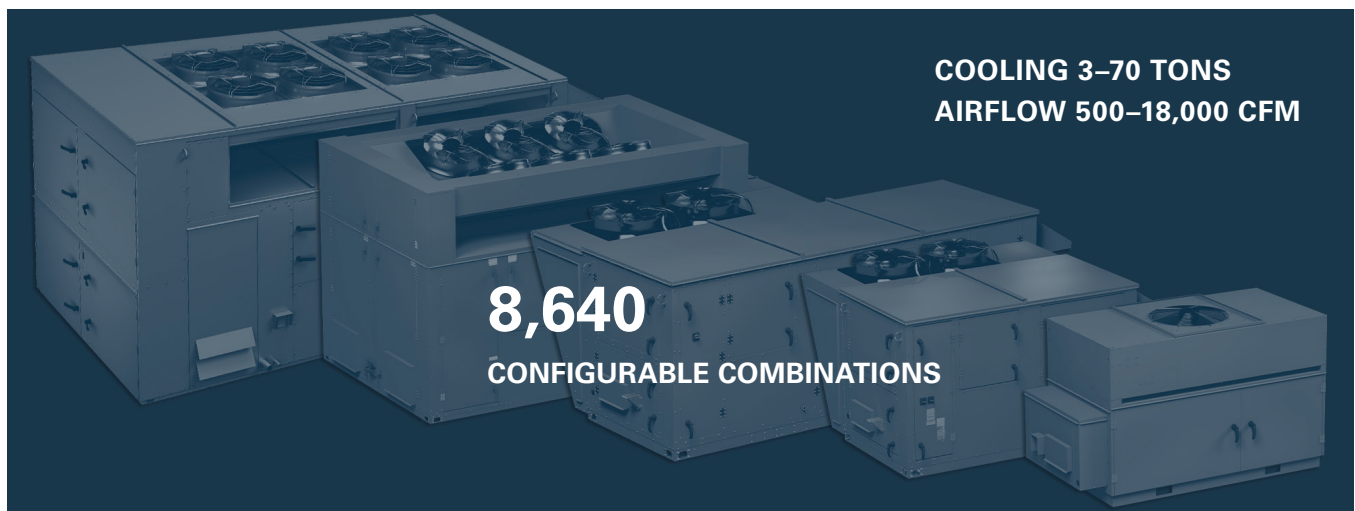
RELY ON VALENT

PREDICTABLE PERFORMANCE

EVERY UNIT FACTORY-TESTED

A full factory run test ensures operation at start-up. Compressors and mechanical component operation are verified and VFD drives are factory-programmed.

Factory testing ensures operation at start-up.

EASY, EFFICIENT CONTROLS

Pre-configured control sequences, embedded web user interface, seamless interoperability, and on-screen refrigeration detail provide easy and reliable unit control.

Pre-configured controls shorten start-up time.

EASY INSTALLATION

ON-TIME SHIPPING

It is critical for the project schedule that your HVAC units arrive when you need them. On average, Valent ships 98% of units on or before the promised ship date.

Delivery you can count on.

SIMPLE START-UPS

It doesn't get much easier than our three-step installation:

1. **Inspect.** Check curb, utility connections, sensors.
2. **Enable** the unit from the keypad.
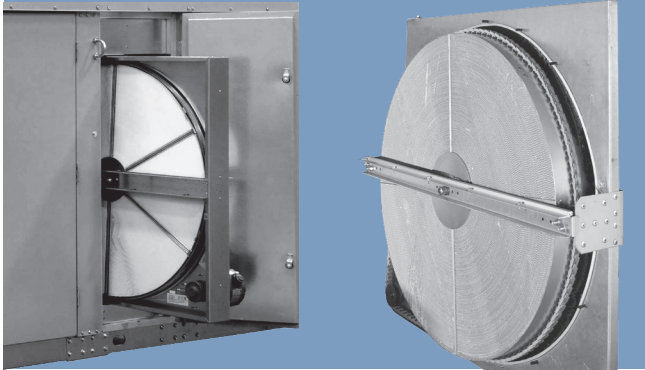3. **Adjust** set points, gas pressure, tune cooling.

Save time with Valent's Web UI, standard on all units. View or modify multiple data points on each intuitively-organized web page, which is much faster than scrolling through handheld keypad screens.
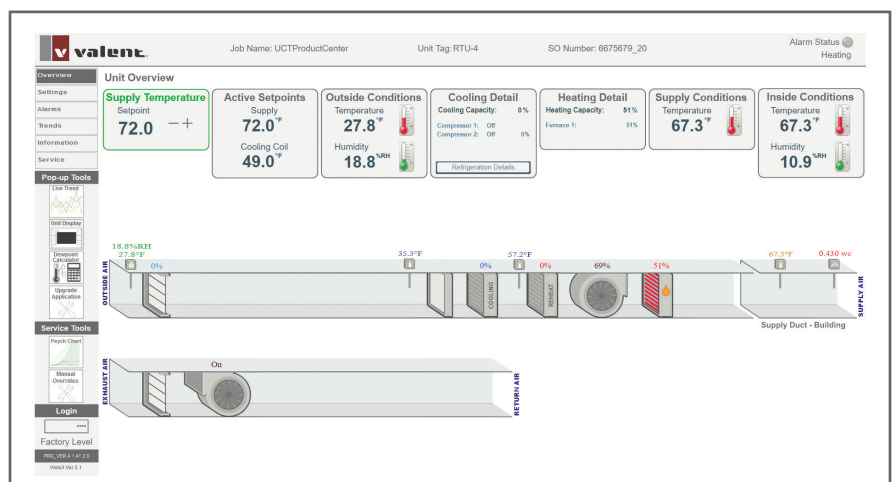
VALENT OPTIONS

ENERGY RECOVERY OPTIONS

FULL WIDTH ENTHALPY WHEELS	ENTHALPY CORE

- Latent and sensible recovery
- Most efficient
- AHRI 1060 certified

Valent's rotating enthalpy wheels recover up to 70% of return air energy and slide out for easy access. Two enthalpy wheel types are available: a lightweight polymer wheel with silica gel desiccant, and an aluminum wheel with molecular sieve media.
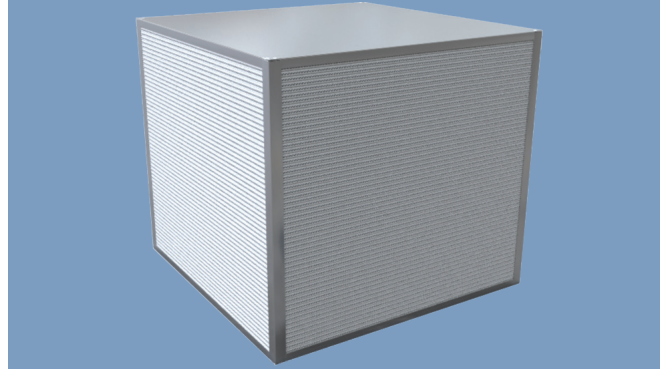
- Latent and sensible recovery
- No moving parts
- AHRI 1060 certified

Valent's enthalpy core heat exchangers have minimal maintenance requirements and an exhaust air transfer ratio (EATR) of less than 1%. The core is available in a polymer or fiber material. The polymer core can safely handle accumulated condensate without sustaining frost damage.

COOLING, HEATING, CONTROL, CONSTRUCTION OPTIONS

COOLING CAPACITY
- 3–70 tons

COOLING OPTIONS
- Packaged, air-cooled
- Air source heat pump
- Chilled water
- Inverter scroll compressors
- Modulating hot gas reheat
- Modulating EC condenser fans

AIRFLOW CAPACITY
- 500–18,000 cfm

HEATING OPTIONS
- Indirect gas 75–1,200 MBh
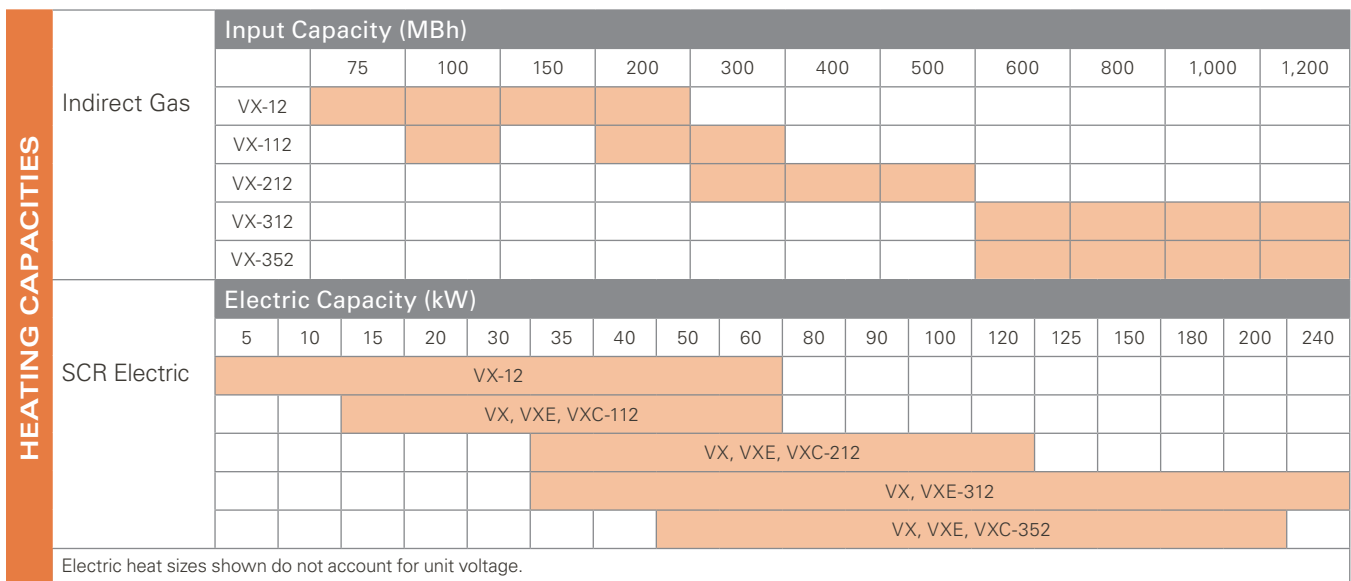- Up to 16:1 turndown furnaces
- Electric 5–200 kW
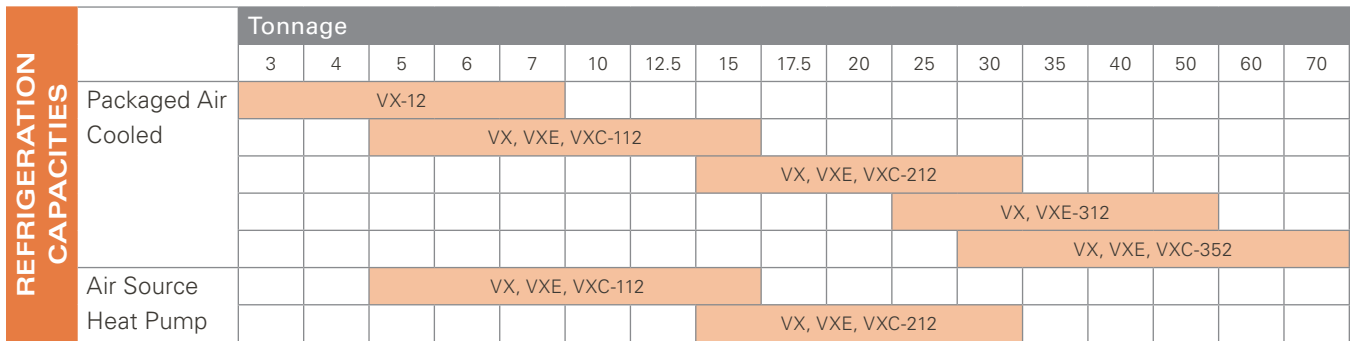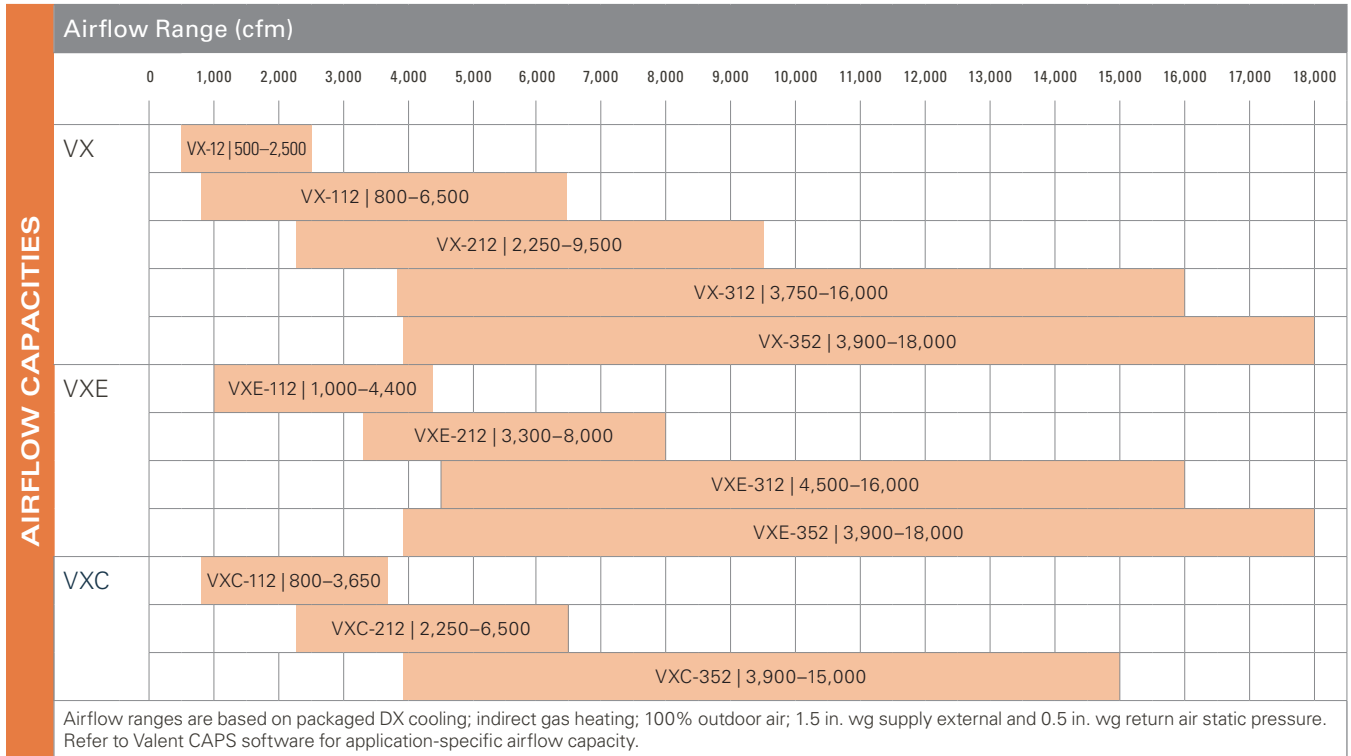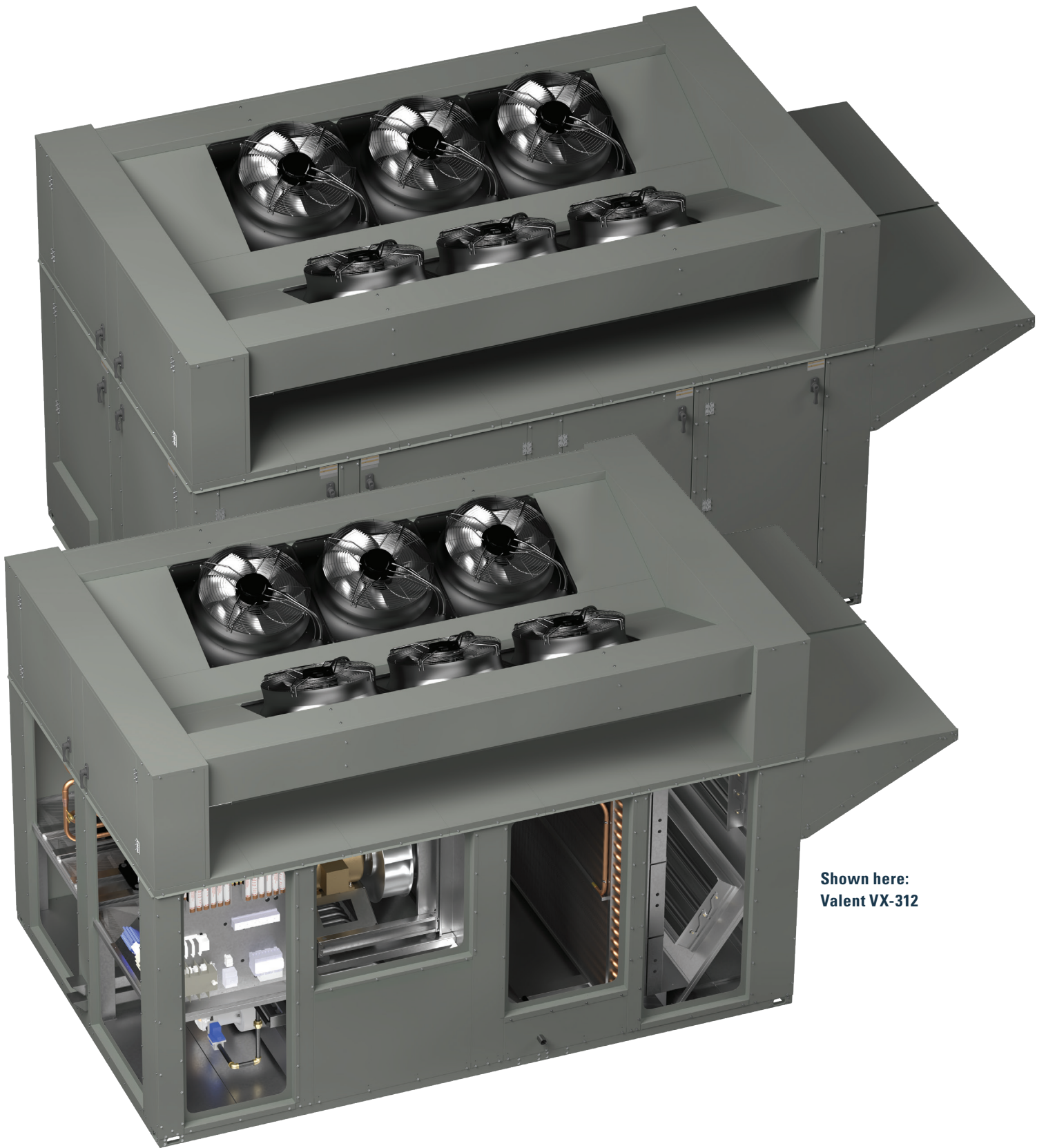- Hot water
- Steam coil

CONTROL OPTIONS
- Full control
- Heat-cool only control

CONSTRUCTION
- 2" R-13 injected foam insulated panels, floors, doors, and roof
- Multiple access doors with rugged handles
- Pre-painted casing
- Sloped roof
- Galvanized interior
- Multiple duct connections

PRODUCT DATA

AIRFLOW CAPACITIES

Airflow Range (cfm) — scale: 0 to 18,000

VX
- VX-12 | 500–2,500
- VX-112 | 800–6,500
- VX-212 | 2,250–9,500
- VX-312 | 3,750–16,000
- VX-352 | 3,900–18,000

VXE
- VXE-112 | 1,000–4,400
- VXE-212 | 3,300–8,000
- VXE-312 | 4,500–16,000
- VXE-352 | 3,900–18,000

VXC
- VXC-112 | 800–3,650
- VXC-212 | 2,250–6,500
- VXC-352 | 3,900–15,000

Airflow ranges are based on packaged DX cooling; indirect gas heating; 100% outdoor air; 1.5 in. wg supply external and 0.5 in. wg return air static pressure. Refer to Valent CAPS software for application-specific airflow capacity.

REFRIGERATION CAPACITIES

Tonnage

	3	4	5	6	7	10	12.5	15	17.5	20	25	30	35	40	50	60	70
Packaged Air Cooled — VX-12	X	X	X														
Packaged Air Cooled — VX, VXE, VXC-112		X	X	X	X	X	X	X									
Packaged Air Cooled — VX, VXE, VXC-212								X	X	X	X	X					
Packaged Air Cooled — VX, VXE-312											X	X	X	X			
Packaged Air Cooled — VX, VXE, VXC-352												X	X	X	X	X	X
Air Source Heat Pump — VX, VXE, VXC-112			X	X	X	X	X	X									
Air Source Heat Pump — VX, VXE, VXC-212								X	X	X	X						

HEATING CAPACITIES

Input Capacity (MBh)

	75	100	150	200	300	400	500	600	800	1,000	1,200
Indirect Gas — VX-12	X	X	X	X							
Indirect Gas — VX-112		X	X	X	X						
Indirect Gas — VX-212					X	X	X				
Indirect Gas — VX-312								X	X	X	X
Indirect Gas — VX-352								X			

Electric Capacity (kW)

	5	10	15	20	30	35	40	50	60	80	90	100	120	125	150	180	200	240
SCR Electric — VX-12	X	X	X	X	X	X	X	X	X									
SCR Electric — VX, VXE, VXC-112			X	X	X	X	X	X	X	X								
SCR Electric — VX, VXE, VXC-212						X	X	X	X	X	X	X	X	X				
SCR Electric — VX, VXE-312						X	X	X	X	X	X	X	X	X	X	X	X	X
SCR Electric — VX, VXE, VXC-352								X	X	X	X	X	X	X	X	X	X	

Electric heat sizes shown do not account for unit voltage.

OUTDOOR AIR EXPERTS | ROBUST DESIGNS | DEDICATED SUPPORT

Shown here:
Valent VX-312

VALENT OFFERS A WIDE CAPACITY RANGE

3–70 TONS COOLING, 500–18,000 CFM AIRFLOW
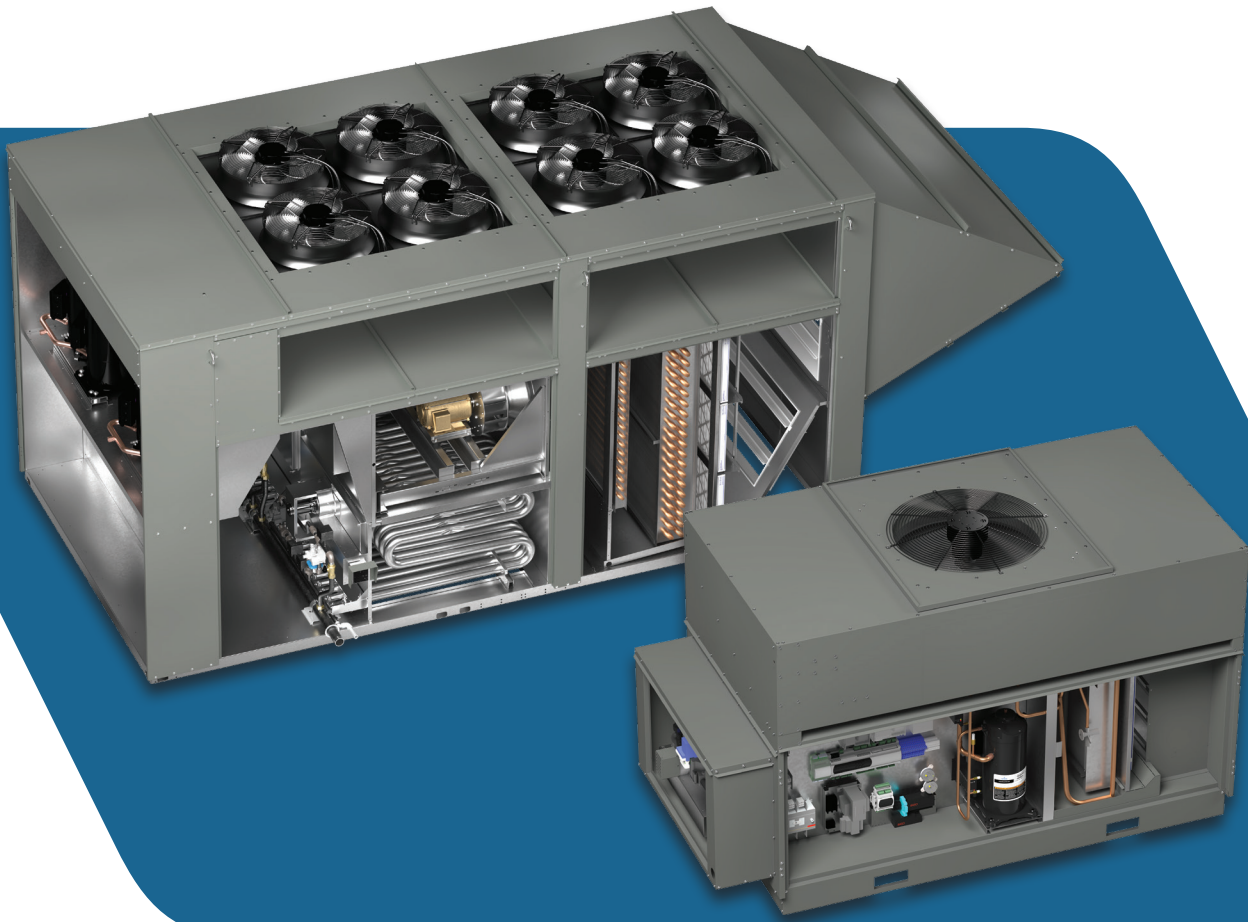
LEARN MORE

- Visit our website at **valentair.com**.

- Download our **Valent Datasheet** for detailed specifications by model.

- Find a **Valent Representative**.

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valentair.com